

**Autumnwood ESH Consultants**

6539 Autumnwood Court  
Mount Pleasant, Wisconsin 53403  
Phone: 262.237.1130

15 November 2018

Mr. John Nordine  
U.S. EPA Region 5  
RCRA Enforcement and Compliance Assurance Branch (LU-16)  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, October 2018  
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for October 2018.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the **Ex. 6 Personal Privacy (PP)** analytical data for Volatile Organic Compounds which are included in the 10-2018 NPDES Analytical Report file.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

**Autumnwood ESH Consultants, LLC**

John W. Thorsen, P.E.

JWT: jt

Encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

**MONTHLY PROGRESS REPORT**  
**Central Wire Union, Illinois Site**  
**October 2018**

**1 Progress Made This Reporting Period**

**Groundwater Pump & Treat System**

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. During this period CWI rehabilitated the two extraction wells resulting in an overall reduction in the total water treated in October. Extraction well no. 1 was rehabilitated first and is now pumping at a rate of about 425 gallons per minute (GPM) which is 612,000 gallons per day (GPD). In the rehabilitation of extraction well no. 2, CWI found out that the casing was degraded in an area two feet above the screen and needed to be repaired. The repair will entail a custom made screen fitting inside the 6 incasing from the bottom of the well to 1 -1/2 feet below the top of the casing to keep the gravel pack contained outside of the well. That screen should be installed in November 2018.

With the well rehabilitation of Extraction Well No. 1 in October, CWI treated an average of 628,000 GPD with a maximum daily flow of 655,000 GPD. Table 1, attached, lists the average daily P&T volumes by month from January 2015 through October 2018. The influent flow to the pump and treat system had been reduced by about 30,000 gallons per day per month since November 2017 but should increase significantly after both extraction wells are on line.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on October 16, 2018 and arrived at the Test America Laboratory on October 17, 2018 at 0.5° C.

The monthly NPDES sample met effluent limitations for pH, 1,1, t-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for the month is attached to this report.

**Ex. 6 Personal Privacy (PP) Well Samples and Well Usage**

**Ex. 6 Personal Privacy (PP)**

Ex. 6 Personal Privacy (PP) were collected at the same time and sent to the analytical laboratory in the same batch. There were no volatile organic compound detections found in the

Ex. 6 Personal Privacy (PP) samples. The analytical data is in the same analytical report as the pump and treat samples (*10-2018 NPDES Analytical Report*). Ex. 6 Personal Privacy (PP)

Ex. 6 Personal Privacy (PP) sample locations are provided in Figure 1.

The total flow on the Ex. 6 Personal Privacy (PP) flowmeter on November 5 was 66,337,855. On October 10 the flowmeter showed the flow at 66,130,453 gallons. Therefore, Ex. 6 Personal Privacy (PP) used 207,402 gallons over 26 days or approximately 7,800 GPD, significantly less than the average of approximately

65,000 GPD in September.

**Ex. 6 Personal Privacy (PP) Replacement Irrigation and CWI Pump & Discharge Wells at South Branch Nursery**

McHenry County has issued the replacement irrigation well permit and the pump and discharge permit. IEPA has not reissued the CWI NPDES pump and treat permit which includes outfall no. 2 for the discharge from the pump and discharge well to be located at the Ex. 6 Personal Privacy (PP)

The Ex. 6 Personal Privacy (PP) will be shutting down their irrigation well in early November 2018 for the 2018 – 2019 Winter season.

**Irrigation Well Pumpage**

Historically there has been some concern that the Ex. 6 Personal Privacy (PP) wells, located downgradient from the chlorinated plume, have impacted the movement of the plume. As a result, CWI has been monitoring groundwater level fluctuations at the most downgradient monitoring well, DGW-2, since 2010.

Over the month Central Wire personnel read the hour meter on the Ex. 6 Personal Privacy (PP) irrigation well pump engines for Ex. 6 Personal Privacy (PP) wells on a weekly basis. Table 3 provides the data collected from the hour meters on the pump engines. This data is used in Table 4, attached, which plots the groundwater elevations against the daily precipitation and weekly irrigation well pumpage at Ex. 6 Personal Privacy (PP). The precipitation data is from the National Weather Service's Marengo station.

**Table 3**  
**Summary of 2018 Irrigation Pumping Hours per Week at Ex. 6 Personal Privacy (PP)**  
September 1 through October 1, 2018

Date of Hour Meter Reading	Ex. 6 Personal Privacy (PP)				Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
10/1/2018	7331	0	5118	0	0
10/8/2018	7331	0	5120	2	2
10/15/2018	7331	0	5120	0	0
10/22/2018	7331	0	5126	6	6
10/29/2018	7331	0	5148	22	22
11/1/2018	7331	0	5148	0	0
<b>Totals</b>		<b>6</b>		<b>30</b>	<b>30</b>

Regarding comparing the manual groundwater measurements to the data logger, the last September data logger reading of the water level in DGW-2I on 10/1/2018 at 1329

hours was 24.68 feet or 5.66 feet below the top of casing. The manual measurement on that day at about 1530 hours was 5.03 feet below the top of casing. On 11/1/2018 the manual measurement of the depth of the water below the top of casing in DGW-2I was 5.03 feet below the top of casing at about 1530 hours. The last data logger reading of the amount of water above the data logger at 1528 hours was 25.31 feet or 5.03 feet below the top of casing (30.34 feet [data logger below top of casing] – 25.31 feet = 5.03 feet).

Table 4 shows the groundwater levels plotted against daily precipitation and weekly hours of irrigation well pumpage from October 1 to 31, 2018

The groundwater elevation during this period reached its highest level on October 7 at 817.921 feet above mean sea level. The groundwater elevation reached its low on October 1, 2018 at 815.790 feet above mean sea level. The variance during October, and over only six days, was 2.131 feet in monitoring well DGW-2I. This resulted from 4.26 inches of rain over the first seven days of the month.

## 2 Summary of Validated Data and Results

### Pump & Treat System Monthly NPDES Samples

The permit limitations and analytical results are shown in Table 5, below. There were no effluent limitation exceedances.

**Table 5**  
**Central Wire Union Illinois Pump & Treat Effluent Analytical Results**

Parameter	Effluent Limitation (Daily Maximum), µg/L	Effluent Analytical Results, µg/L
1,1,1-Trichloroethane	20	0.24 J
Tetrachloroethene	20	<0.1
Trichloroethene	20	1.0

J = Estimated value. Analyte detected at a level < the Reporting Limit (RL) and > or = to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.

Table 6 tabulates and plots the trends in the effluent limited parameters of TCA, PCE and TCE. The results of the October grab sample were back down to the zone that has trended over 2018 - < 1.5 mg/L, except for June and September.

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

- 3 Upcoming Events/Activities Planned** – CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

CWI has reapplied for the NPDES permit for this system adding a second discharge for the pump and discharge system and awaits permit issuance by IEPA. The current permit expired on May 31, 2018. IEPA has verbally informed CWI that they could continue to operate their pump and treat system under the expired permit until the new permit is issued. The new permit has been public noticed and there have been requests for a public hearing. IEPA is currently making the determination on holding a public hearing. They would like to avoid a hearing.

CWI has submitted a water well permit applications to the McHenry County Health Department for the replacement irrigation well for **Ex. 6 Personal Privacy (PP)** and the pump and discharge well and has responded to comments.

CWI is trying to coordinate the abandonment of the test well with the rehabilitation of the extraction wells. Extraction Well No. 1 has been remediated and is now pumping at 450 GPM. Extraction Well No. 2 is being remediated in October.

CWI has met with **Ex. 6 Personal Privacy (PP)** work out details and schedules and met with them on October 2, 2018 to discuss the contract for use of their property and their attorneys are drafting it now.

Samples will continue to be collected at the **Ex. 6 Personal Privacy (PP)** wells [well no. **Ex. 6 Personal Privacy (PP)**] every month when the irrigation pumps are operating, usually between May and November of each year.

- 4 Anticipated Problem Areas and Recommended Solutions** – None.

- 5 Key Personnel Changes** – None.

- 6 Target and Actual Completion Dates** – This project has not deviated from the project schedule.